

## IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A display device comprising:

~~a pixel region with a plurality of pixel TFTs arranged in matrix; and~~

~~at least one source driver and at least one gate driver for driving said pixel region,~~

~~wherein of m bit digital video data, upper n bit data and lower (m-n) bit data are used as gradation voltage information and time gradation information, respectively, where m and n are both positive integers equal to or larger than 2 and satisfy  $m > n$~~

a pixel region having a plural number of pixel transistors arranged in a matrix shape; and

a circuit for converting m-bit digital video data into  $2^{m-n}$  pieces of n-bit digital video data

(where m and n are both positive integers greater than or equal to 2, and  $m > n$ ),

wherein an image for one frame is formed by displaying  $2^{m-n}$  pieces of subframes formed by the n-bit digital data.

2-80 (Canceled).

81. (New) A device according to claim 1, wherein a liquid crystal is used as a display medium.

82. (New) A device according to claim 1, wherein an EL is used as a display medium.

83. (New) A rear projector having three display devices according to claim 81.

84. (New) A front projector having three display devices according to claim 81.
85. (New) A single stage rear projector having one display device according to claim 81.
86. (New) A goggle type display having two display devices according to claim 1.
87. (New) A portable information terminal having a display device according to claim 1.
88. (New) A notebook type personal computer having a display device according to claim 1.
89. (New) A display device according to claim 1, wherein the display device performs voltage gradation display and time gradation display at the same time.
90. (New) A display device according to claim 1, further comprising a source driver circuit and a gate driver circuit for driving the plural number of transistors.
91. (New) A display device according to claim 90, wherein the n-bit digital video data is supplied to the source driver circuit.
92. (New) A display device comprising:
- a pixel region having a plural number of pixel transistors arranged in a matrix shape; and
- a circuit for converting m-bit digital video data into  $2^{m-n}$  pieces of n-bit digital video data

(where  $m$  and  $n$  are both positive integers greater than or equal to 2, and  $m > n$ ),

wherein an image for one frame is formed by displaying  $2^{m-n}$  pieces of subframes formed by the  $n$ -bit digital data, and

wherein  $(2^m - (2^{m-n} - 1))$  levels of display gradation can be obtained.

93. (New) A device according to claim 92, wherein a liquid crystal is used as a display medium.

94. (New) A device according to claim 92, wherein an EL is used as a display medium.

95. (New) A rear projector having three display devices according to claim 93.

96. (New) A front projector having three display devices according to claim 93.

97. (New) A single stage rear projector having one display device according to claim 93.

98. (New) A goggle type display having two display devices according to claim 92.

99. (New) A portable information terminal having a display device according to claim 92.

100. (New) A notebook type personal computer having a display device according to claim 92.

101. (New) A display device according to claim 92, wherein the display device performs voltage gradation display and time gradation display at the same time.

102. (New) A display device according to claim 92, further comprising a source driver circuit and a gate driver circuit for driving the plural number of transistors.

103. (New) A display device according to claim 102, wherein the n-bit digital video data is supplied to the source driver circuit.